

Work Order ID 61781

Friday, September 03, 2010 9:52:43 AM



Page 1

Item ID:	D3531-3	Accept		Setup	Start	
Revision ID:					Stop	
Item Name:	Bracket Front Plate					
Start Date:	9/3/2010	Start Qty:	5.00			
Required Date:	9/13/2010	Req'd Qty:	5.00			
Reference:						

Approvals:	Process Plan:		Date:	10-9-03	Tooling:		Date:		Run	Start	
	QC:		Date:		SPC (Y/N):		Date:			Stop	

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
Draw Nbr	Revision Nbr								
D3531	Rev A								

100		0.00							
	FLOW WATER JET								
Waterjet	Memo	0.00							
FLOW CNC Waterjet	1-Cut as per Dwg D3531								
6061.040	Dwg Rev:								
	Prog Rev:								
	2-Deburr if necessary								
110	QC2- Inspect parts off machine FAI/FAIB	0.00							
QC	Memo	0.00							
Quality Control									
120	QC8- Inspect parts - second check	0.00							
QC	Memo	0.00							
Quality Control									

10-9-15

6

10-9-15

x6

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 61781

Friday, September 03, 2010 9:52:43 AM



Page 2

Item ID: D3531-3

Accept



Setup Start



Revision ID:

Stop



Item Name: Bracket Front Plate

Start Date: 9/3/2010 Start Qty: 5.00



Cust Item ID:

Required Date: 9/13/2010 Req'd Qty: 5.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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130

0.00



Small Fab

0.00

Small Fab

Memo

Deburr if necessary.

u/n/s

Small Fab

0.00

140



NC BRAKE

0.00

Brake NC

Memo

Bend as per Dwg D3530

Brake NC

0.00

150



QC5- Inspect part completeness to step on W/O

0.00

QC

Memo

Quality Control

S.oloriz

Photo →

(X)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: D3531-3 PAR #: _____ Fault Category: Small Fabs NCR: Yes ☒ No ☐ DQA: ✓ Date: 10-05-28
 Resolution: Accepted Disposition: use as is. QA: N/C Closed: _____ Date: _____

NCR: <u>61781</u>		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action - Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			
<u>10/09/21</u>	<u>140</u>	<u>1 part supposed to be 2.32 \pm .005 to 2.335 R.C. Beginning setup.</u>	<u>[Signature]</u> <u>09/21</u>	<u>fit well in D3531-1 acceptable - 1 bracket has a +0.030" tolerance to accommodate</u>	<u>[Signature]</u> <u>10/09/21</u>	<u>[Signature]</u> <u>10/09/21</u>	<u>[Signature]</u> <u>09/21</u>	<u>[Signature]</u> <u>10-09-21</u>

NOTE: Date & initial all entries

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

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NOTE: Date & initial all entries

Work Order ID 61781

Friday, September 03, 2010 9:52:43 AM



Page 4

Item ID: D3531-3

Accept



Setup Start



Revision ID:

Stop



Item Name: Bracket Front Plate

Start Date: 9/3/2010 Start Qty: 5.00



Cust Item ID:

Required Date: 9/13/2010 Req'd Qty: 5.00



Customer:

Reference:

Approvals:

Process Plan: _____

Date: _____

Tooling: _____

Date: _____

Run Start



QC: _____

Date: _____

SPC (Y/N): _____

Date: _____

Stop

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run Hours

Tool ID

Tool #

Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

190

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

10/09/27

ME
10-9-24

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

Friday, September 03, 2010 9:52:48 AM

Page 1

Work Order ID: 61781



Parent Item: D3531-3



Parent Item Name: Bracket Front Plate


Start Date: 9/3/2010

Required Date: 9/13/2010

Start Qty: 5.00

Required Qty: 5.00

Comments: IPP Rev:A New Issue 07-09-24 EC verified by DD

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
M6061T6S.040  6061-T6 .040 Sheet		Purchased	No			100	sf	86.7300	0.1313	0.691053		8 20-9-15	

Location

Loc Qty

Loc Code

MAT21

86.73

113004

86.73

113004

(6)

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART AEROSPACE LTD		Work Order:	61781
Description: Bracket Front Plate		Part Number:	D3531-3
Inspection Dwg: D3531 Rev: A		Page 1 of 1	

FIRST ARTICLE INSPECTION CHECKLIST

☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
Ø0.129	+0.005/-0.001	.130	✓		✓ HB02	
3.72	+/-0.030	3.725	✓		✓	
0.37	+/-0.030	.372	✓		✓	
2.840	+/-0.010	2.839	✓		✓	
0.88	+/-0.030	.881	✓		✓	
3.50	+/-0.030	3.499	✓		✓	
4.67	+/-0.030	4.666	✓		✓	

Measured by: B	Audited by: S	Prototype Approval:	N/A
Date: 10-9-15	Date: 10/09/17	Date:	N/A

Rev	Date	Change	Revised by	Approved
A	07.10.15	New Issue	KJ/EC/DD	✓

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

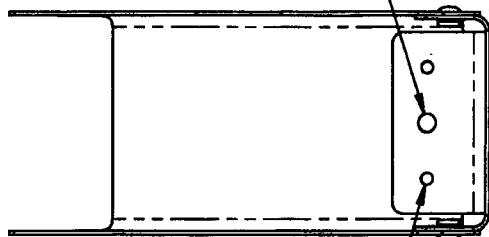
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN CB	DRAWN BY CB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED LE	APPROVED HA	DRAWING NO. D3531	REV. A SHEET 1 OF 3
DATE 07.06.19	TITLE BRACKET ASSEMBLY		SCALE 1:2
REV A	DATE 07.06.19	DESCRIPTION NEW ISSUE	

△
TRANSFER DRILL #9 (Ø0.196)



TRANSFER DRILL #30 (Ø0.129)
INSTALL MS20470AD4-4 RIVET
(2 PLACES)

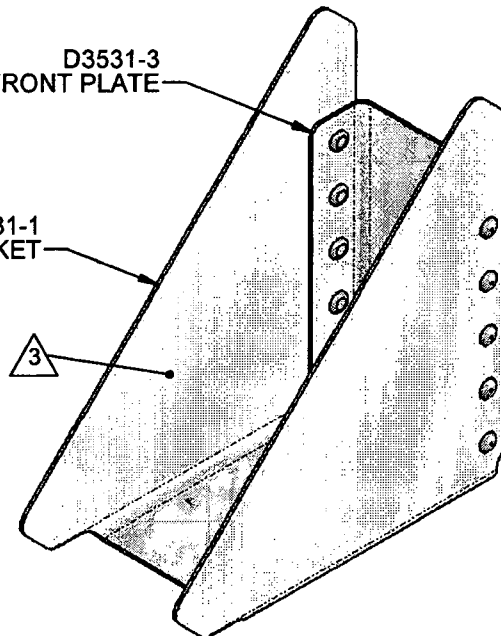
△

RELEASED
07-08-03

D3531-3
BRACKET FRONT PLATE

D3531-1
BRACKET

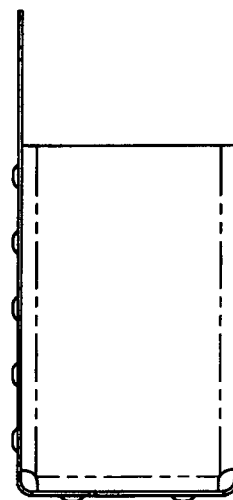
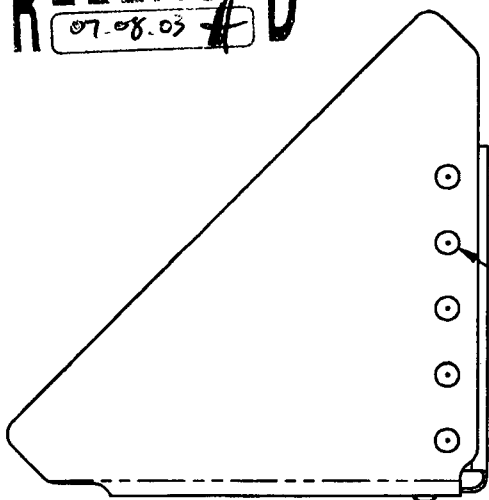
△
3



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER

NO. **41781**
Bd 10-9-03

MS20470AD4-4
(10 PLACES)



D3531-041 BRACKET ASSEMBLY

NOTES:

- 1) FINISH: POWDER COAT ASSEMBLY BLACK
SANDTEX (4.3.5.7) PER DART QSI 005 4.3
ALL PARTS
- 2) ASSEMBLE PER DART QSI 003
- 3) IDENTIFY WITH DART P/N "D3531-041" USING
WHITE MARKER ON INSIDE OF BRACKET
ASSEMBLY, WHERE INDICATED
- 4) TRANSFER DRILL HOLES FROM D3531-1 BRACKET
THROUGH D3531-3 BRACKET FRONT PLATE
BEFORE FINISHING

PARTS LIST

QTY.	P/N	DESCRIPTION
X	D3531-041	BRACKET ASSEMBLY
1	D3531-1	BRACKET
1	D3531-3	BRACKET FRONT PLATE
12	MS20470AD4-4	RIVET

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W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

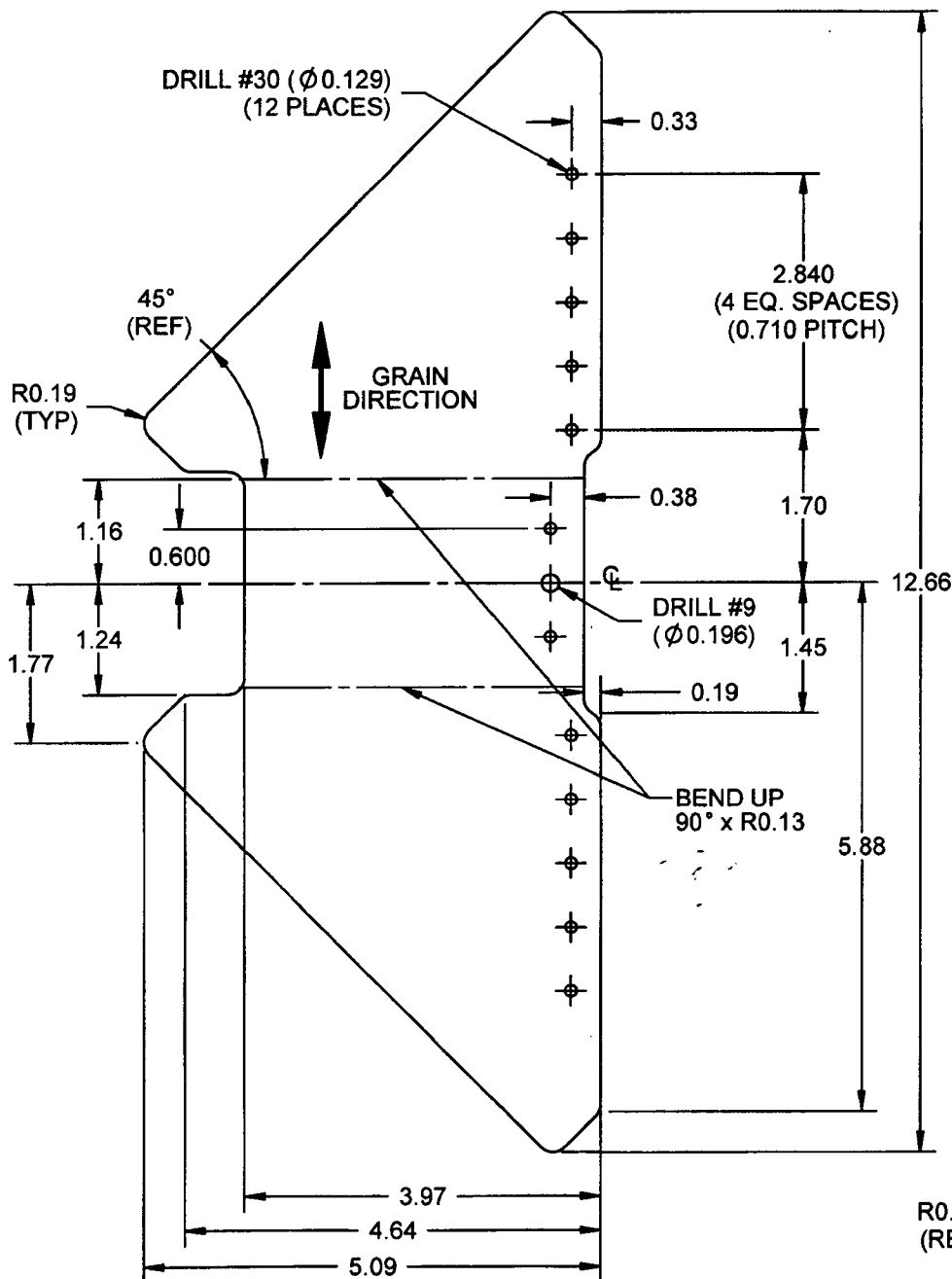
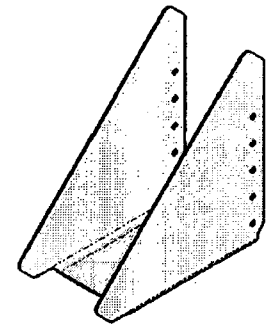
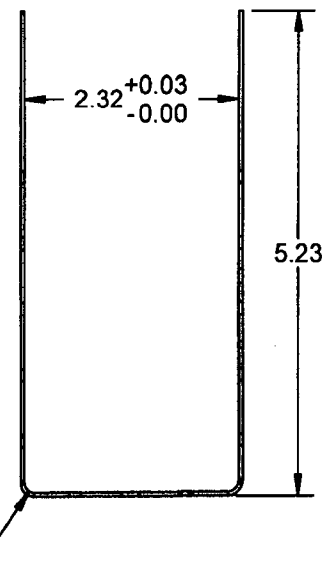
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN CB	DRAWN BY CB	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED LE	APPROVED [Signature]	DRAWING NO. D3531	REV. A
DATE 07.06.19		TITLE BRACKET ASSEMBLY	SHEET 2 OF 3 SCALE 1:2

**D3531-1F FLAT PATTERN****RELEASED**
07.08.03**D3531-1 BRACKET****NOTES:**

- 1) MATERIAL: ALUMINUM 6061-T6/T62 SHEET, 0.040 THICK PER QQ-A-250/11 OR AMS 4025 OR AMS 4027 (REF DART SPEC M6061T6S.040)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP CORNERS TO 0.010 MAX
- 6) PART IS SYMMETRIC ABOUT ϕ

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DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

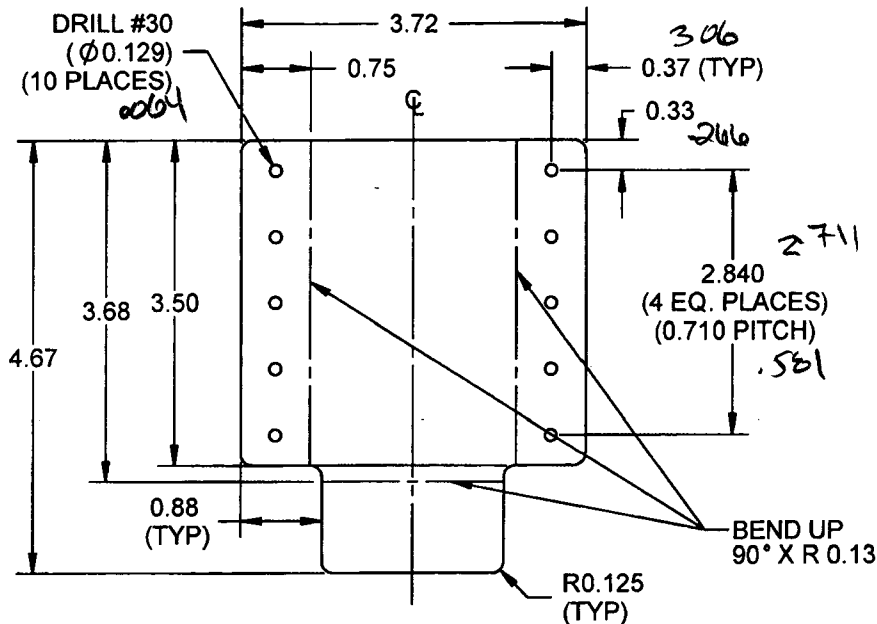
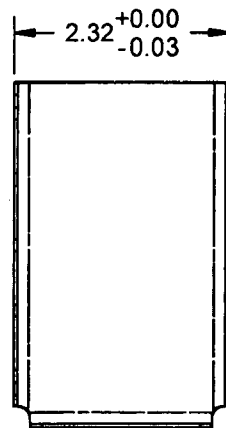
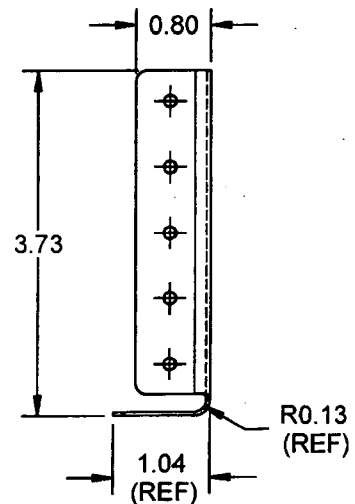
Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

DART

DESIGN <i>CB</i>	DRAWN BY <i>CB</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>CE</i>	APPROVED <i>#</i>	DRAWING NO. D3531	REV. A SHEET 3 OF 3
DATE 07.06.19		TITLE BRACKET ASSEMBLY	SCALE 1:2

**D3531-3F FLAT PATTERN****D3531-3 BRACKET FRONT PLATE****NOTES:**

- 1) MATERIAL: ALUMINUM 6061-T6/T62 SHEET, 0.040 THICK PER QQ-A-250/11 OR AMS 4025 OR AMS 4027 (REF DART SPEC M6061T6S.040)
- 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE NOTED
- 5) BREAK ALL SHARP CORNERS TO 0.010 MAX
- 6) PART IS SYMMETRIC ABOUT ϕ

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